

## NOTES | November 29, 2011

### Mono Basin Core Working Group Meeting in Mammoth

Prepared by Center for Collaborative Policy

*Core Group approved 5/30/2012.*

### Meeting in Brief

The Core Working Group (Core Group) agreed to move forward with its analysis of if and how a change in SCE flow release on Lee Vining Creek could help achieve stream ecosystem flows (SEF's). The Core Group will invite SCE to attend the Jan. 5 meeting to discuss the analysis. The Modeling Work Group has reviewed the LAASM and LAAMP regression equations to compare predictions for Mono Lake levels and anticipates having a formal report ready by the Dec. 13 modeling meeting (which will compare results to eStream). The Modeling Work Group as well as LADWP will each advance on Parker & Walker Diversion Curtailment (Feasibility Letter #16). Delon Kwan (LADWP) presented the results of a recently released climate change study.

### Next Core Working Group Meeting: January 5, 2012, 10:00-4:00 p.m., Bishop

**Topics:** SCE Invited to Discuss Flow Requests; Finalize Charter; Modeling Validation; Modeling Work Group Questions for the Core on Preparing Scenarios 3, 4 & 5; Approach to Parker & Walker Skimming Temperature Modeling Lake Infrastructure, Engineering Matrix

### Action Items

Due		Action Items
1/5	Taylor	Present potential temperature modeling scenarios (to evaluate the impact of skimming on temperature) for Parker & Walker Creeks for discussion by Core Group
1/5	Taylor	Winter Icing: analyze Lee Vining Creek (unimpaired) by year-type (Chart 4-1, p. 74 of Synthesis Report).
1/3	Coufal	Update the matrix (used to evaluate Grant Options) with numbers for the group to discuss at the 1/5 meeting.
1/3	Vorster & Reis	Send Gina (for Core) formal request letter that would go to SCE re: Rush and Lee Vining requesting specifics of flows / timing (i.e. physical issues), and quantitative element / context (to clarify the anticipated ecosystem benefit and changes in flow expected)
1/3	Coufal	Solicit input from attorney re: the possibility of a 1707 in-stream flow dedication to preserve Parker & Walker water rights
1/3	Taylor & Trush	Identify elements for the Modeling Work Group to include in its presentations and analyses (i.e. graphing the number of "good days" associated with a particular scenario alternative or comparing exports with percentage of SEFs)
1/19	Martin	Draft an outline for the 'kitchen sink' document
9/29	Modeling Work	<b>Lee Vining Flows:</b> Address with Modeling Work Group: potential to

	Group	bring back to an 8-year flood event if Saddlebag releases 40cfs on Lee Vining (Synthesis Report, p. 78); modeling approaches for Parker/Water diversions (under the 98-05 rules)
9/21	Tillemans	Get data on 1995-2001 (when Grant did not go below spill for six consecutive years) to determine impact on dam and dam safety
NA—	NOTE: Brian White submitted to State Water Board	Clarify the SWRCB's interest in Core Group input on limnology. Identify any areas of agreement among Core Group members re: desired limnology outcomes. Talk with Brian White. Then make recommendations to group.
done	Drew	Speak with attorney to clarify an outstanding comment about the State Board's role with lack of consensus (in the Charter)
done	Vorster & Reis	Polish SCE presentation with Bill, Ross & Steve; review with Gina as needed.
done	Vorster & Reis	Provide information request to Jon Regelbrugge in form of email he can share with SCE
done	Core	Submit additional criteria for evaluating Grant Options
done	Tanaka	Send the Core Group Rich Satkowski's memo explaining the assumptions behind D1631.

## SCE Next Steps

Prior to making a formal request to SCE about changing flow releases on Lee Vining Creek, the Modeling Work Group must determine the anticipated impacts that an increase in flow would have on Stream Ecosystem Flows (SEFs). Jon Regelbrugge (USFS) will send a request to SCE for operational and quantitative data regarding physical issues and specific timing of flows on Rush and Lee Vining Creeks. Upon receipt of this data, the Core Group (or Modeling Work Group) will be able to assess percent changes in flow as well as provide a contextual analysis of if/how flow changes could benefit the greater ecosystem. Greg Reis and Peter Vorster will aim to complete this analysis in advance of the Jan. 5 Core Working Group (Core Group) meeting; if needed, the Core Group will draft a formal request for SCE to change flow releases and invite SCE to attend the meeting to provide comments. In summary, the next steps are:

1. By Dec. 5, Greg and Peter will draft an information request and send to Jon
2. Greg and Peter will polish the presentation with Bill Trush, Ross Taylor and Steve Parmenter
3. Greg & Peter will vet appropriate elements with the Modeling Work Group
4. By 1/3, Greg & Peter will prepare a formal request letter for Rush and Lee Vining for the Core Working Group to review after SCE meeting. The letter will concentrate on: (a) physical requests—what can SCE do and (b) Quantitative element—ecosystem benefits and changes in flows.

## Modeling Update

The Modeling Work Group has reviewed the LAASM and LAAMP regression mechanisms to compare how each predicts a change in Mono Lake levels. While LAASM is predicting slightly higher (0.7 feet) lake levels, both models display similar patterns and are otherwise consistent. The Modeling Work Group has not yet compared these results to eStream, as the regression equations

are still in process and being developed. The Modeling Work Group anticipates reviewing this in more detail at its December 13<sup>th</sup> modeling meeting. A memo discovered in Rich Satkowski's files has proven valuable to understanding the criteria and assumptions made for the D1631 rules and may help the Core Group understand discrepancies between the results of the different models. Stacy Tanaka will distribute this memo to the Core Group.

To advance on Parker & Walker Diversion Curtailment (Feasibility Report Topic #16), Ross Taylor's colleague will analyze potential temperature modeling scenarios to evaluate the impact of skimming on Parker & Walker Creeks. In addition, LADWP will solicit input from its attorney re: the possibility of a 1707 in-stream flow dedication to preserve water rights in cases where LADWP is not diverting.

## **Monitoring Program**

The monitoring program's primary objectives would be to examine (1) LADWP compliance in meeting the Stream Ecosystem Flows and (2) effective recovery and restoration. Monitoring for compliance is straightforward, and Core Group members are in agreement on how to proceed. Core Group members have differing opinions about the relationship between recovery criteria and termination criteria. The Monitoring Work Group has also been contemplating a proposal for time-certain termination of monitoring elements. The Core Group discussed these overall challenges. After discussions, the Monitoring Work Group agreed to think more about a hybrid approach that combines time-certain for some elements and also allows for adaptive management for other criteria. The hybrid approach could use termination criteria for some variables and incorporate periodic data evaluations to inform management. Under the set-year concept, if LADWP were in compliance by the designated year, the State Water Board would have the authority to determine and mandate any needed adjustments.

This hybrid approach would provide the opportunity to learn from (and modify) the monitoring as it progresses, for example scaling back monitoring if the vegetation or fisheries are within a certain range of percentage of the targeted recovery. If recovery reaches a plateau, the Monitoring Work Group may agree that it is not necessary to monitor certain criteria every year, which could alleviate cost concerns as well. The Core Working Group may wish to limit adaptive management to factors that do not alter the volume of total water allocation.

The Monitoring Work Group will strive to identify the monitoring variables and thresholds so that assessing progress of recovery in different areas (i.e. vegetation, fisheries, geomorphic) is manageable. The hybrid proposal could define a phase-out of most monitoring activities by a set number of years and allow for adaptive management where monitoring of certain criteria would continue until achievement of the agreed-upon objective. The Monitoring Work Group will also determine the criteria for the periodic reviews, including timing and frequency of data collection as well as external factors (such as Year Type) that would impact data analysis. The Core Group recognizes that recovery is a long-term process that will need to be evaluated within the context of how the SEF's are being delivered.

The Monitoring Work Group will also consider synthesizing the numerous existing Monitoring requirements (currently housed in separate documents) into a unified document that would

become part of the new Order and replace all previous memos (i.e. Hunter, 2007 on relative stock density). The unified document would address compliance and restoration achievement.

### **Next Steps**

- The Monitoring Work Group will talk through and consider a more detailed proposal for a hybrid-monitoring program.
- Core Group members should speak with their attorneys to receive input as this hybrid proposal is under development.

### **Limnology**

The Core Group is unsure whether the State Water Board requires Brian White (a State Water Board-appointed scientist and LADWP employee) to solicit Core Group input with regards to limnology. While limnology is not part of the Stream Scientists' recommendations, the Core Group thinks it is appropriate to the ultimate 'kitchen sink' document. Several Core Group members expressed concern at the possibility of not being able to provide input on this issue as part of the facilitated process.

### **Next Steps**

- Gina will contact the State Water Board to clarify the Board's decision-making process and gauge its interest in the Core Group's input on limnology.
- Gina will speak with individual Core Group members to assess any areas of agreement on desired outcomes from the limnology process. She will report back to the Group.
- Gina will talk with Brian White.

### **Engineering Options Revisited for Potential Structural Changes to Grant**

While the projected costs for each proposed engineering option are rough estimates (and represent capital costs but not operational and annual maintenance costs), LADWP feels they are sufficient for the Core Group to compare and assess each option. The Core Group will submit additional criteria for evaluating potential structural changes to Grant, including export benefit, operations and annual maintenance costs, compliance, project lifespan, and relationship to other planned maintenance that might dovetail or offset costs or affect cost considerations.

### **Next Steps**

- LADWP will update the matrix with additional criteria for consideration (based on input from the Core Group) and numbers for the group to discuss – *by Jan. 5*
- Modelers will present results (evaluation of Alternatives 3, 4, and 5) and rule set – *by Jan. 19*
- Core Group to reach agreement in principle on Grant – *target date of Feb. 1.*

### **LADWP Report on Climate Change**

Delon Kwan (LADWP) presented the results of a climate change study conducted to evaluate the 21<sup>st</sup> century impacts of projected climate change impacts on the Eastern Sierra Nevada watershed and the Los Angeles Aqueduct system (LAA). The purpose of the study was to explore how the LAA would respond to climate change over the next 100 years. Results of the study indicated steady

temperature increases throughout the 21<sup>st</sup> century, with more rain and less snow projected, and potential shift in earlier runoff. Results of this study are incorporated into Chapter 12 of the City of Los Angeles' recently adopted [2010 Urban Water Management Plan](#); if external agencies have additional questions on this study, they may contact Gene Coufal.

## **Document Review**

- LADWP presented a draft of the progress letter to the State Water Board (due Dec. 1). Edits must be submitted to Bruk Moges by noon on Nov. 30. The Core Group will submit the Charter under separate cover once it is finalized.
- The Core Group agreed to add a preamble to the Charter that clarifies that (1) it is a document to outline the Core Group's rules of engagement, and (2) it is not an official document of the organizations whose members are engaged in this facilitated process. Gina will edit the Charter to reflect this clarification and send to the Core Group for review. Mark Drew will speak with his attorney to clarify an outstanding comment about the State Board's clarification about the process when the Core Group cannot reach agreement.
- The Core Group reviewed the October 3-4 Meeting Summary. Gina will incorporate edits and submit to the group at the next meeting for final approval prior to posting to the State Water Board and Lahontan Water Board.

## **Meeting Schedule**

- The retreat (scheduled for Jan. 31, Feb 1 & 2) is contingent upon the modeling work being completed and operational; after the Dec. 12<sup>th</sup> modeling meeting, Gina will confirm if the retreat will occur.
- Gina maintains an updated schedule of all meetings on Dropbox (Dropbox > work plan – schedule > All Meetings). The schedule provides information on the date, time, and location of all meetings of the Core Group and Working Groups. Please consult this for the most updated information about the status of upcoming meetings.

## **Attendance**

### **IN PERSON**

Gene Coufal, Los Angeles Department of Water and Power (LADWP)

Lisa Cutting, Mono Lake Committee (MLC)

Mark Drew, California Trout

Dave Martin, LADWP

Steve Parmenter, Department of Fish & Game

Jon Regelbrugge, U.S. Forest Service

Brian Tillemans, LADWP

### **BY PHONE**

Greg Reis, MLC

Paul Pau, LADWP  
Ali Karimi, LADWP  
Delon Kwan, LADWP  
Geoff McQuilkin, MLC  
Bruk Moges, LADWP  
Stacy Tanaka, Watercourse  
Ross Taylor, Ross Taylor & Associates  
Eric Tillemans, LADWP  
Tobi Tyler, Lahontan Regional Water Quality Control Board  
Peter Vorster, MLC

**STAFF**

Facilitator Gina Bartlett, Center for Collaborative Policy (CCP)  
Note-taker Hannah Murray (CCP)